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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,431	10/16/2001	Michael T. Andreas	MTI-31555	5688
31870	7590	12/17/2004	EXAMINER	
WHYTE HIRSCHBOECK DUDEK S.C. 555 EAST WELLS STREET SUITE 1900 MILWAUKEE, WI 53202			KORNAKOV, MICHAIL	
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,431

Applicant(s)

ANDREAS, MICHAEL T.

Examiner

Michael Komakov

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-79 and 139-148 is/are pending in the application.
- 4a) Of the above claim(s) 8, 11-14, 21, 25, 29, 38-41, 47, 48, 67-69, 74, 75 and 145 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10, 15-20, 22-24, 26-28, 30-37, 42-46, 49-66, 70-73, 76, 77, 139-144 and 146-148 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-79 and 139-148 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/04/2004 has been entered.

2. Applicant previously elected the following species out of elected claims 1-79:

antimicrobial agent –sorbic acid and its derivatives;

solvent -water

residual particles – metal particles

The following claims are readable on the elected species:

1-7, 9, 10, 15-20, 22-24, 26-28, 30-37, 42-46, 49-66, 70-73, 76, 77, 139-144, 146-148.

3. Independent claims have been amended to replace the transitional phrase for the composition from “comprising” to “consisting essentially of”.

4. New claims 139-148 were presented after final rejection.

5. It is once again reiterated here that the preamble in the present composition claims recites a statement of intended use or purpose, and a does not limit the scope of the claim, since the statements in preamble merely define the context in which the invention operates, *DeGeorge v. Bernier*, 226 USPQ 758,761, n.3 (Fed.Cir. 1985).

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Likewise the prior art reference disclosing the composition need not disclose a utility to defeat patentability under 35 U.S.C. § 102. In re Schoenwald, 964 F. 2d 1122, , 1123-1124, 22 USPQ 2d. 1671, 1672-1673 (Fed. Cir. 1992). In other words, the intended use of a composition is not accorded a patentable weight, since the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, therefore, the preamble is not considered a limitation and is of no significance to claim construction. Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also Rowe v. Dror, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir.1997), Kropa v. Robie, 187 F.2d at 152, 88 USPQ2d at 480-81

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

7. Claims 76, 77, 144, 145 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The recited claims do not add any further limitations to the claimed composition, but rather add the features to the intended use of the composition.

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8. Claims 1-5, 7, 9, 10, 18-20, 22-24, 28, 30-35, 37, 62, 66, 70, 71, 76, 77, 139, 141-144 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 5,599, 555 to EI-Nokaly.

EI-Nokaly discloses a composition wherein an intermediate composition is formed by adding fibers to the **citric acid, potassium sorbate and water under high shear**. Another important component of the aqueous phase are the preservatives, for example, citric acid, potassium sorbate and sodium benzoate. The preservatives are added in amounts effective to prevent oxidation, bacterial and mold growth.

It is once again emphasized that since the composition of EI-Nokaly is identical to that instantly claimed it is fully capable of performing all actions as recited in the instant claims. It is further noted that the fact that the prior art composition is an intermediate does not defeat anticipation. Composition claims are interpreted to read on any composition at any time that contains the same proportions and ingredients. Exxon Chem. Pats., Inc. v. Lubrizoll Corp., 64 F.3d 1553, 35 USPQ 2d 1801, 1805 (Fed. Cir. 1995).

9. Claims 1-7, 9, 10, 17-20, 22-24, 26-28, 30-37, 42-46, 50-60, 62-66, 70, 71, 76, 77, 141-144, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 4,772,501 to Johnson.

Johnson discloses liquid preservative composition consists essentially of: (a) **a mixture of citric acid and sorbic acid as the preservative component**; (b) **water**, and (c) optional ingredients selected from the group consisting of skin moisturizers and fragrance compounds (abstract).

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Johnson emphasizes that liquid preservative composition ***consisting essentially of***:

(a) a mixture of citric acid and sorbic acid as the preservative component; (b) water; and (c) optional ingredients selected from the group consisting of skin moisturizers and fragrance compounds. The citric acid and sorbic acid are present in the liquid preservative composition in effective amounts as preservatives (antibacterial growth is inhibited). The combination of citric acid and sorbic acid in the liquid preservation composition provides excellent preservative activity against various microorganisms, particularly the five pathogenic microorganisms identified in the U.S.P. twenty-eight day challenge test.

The sorbic acid is preferably present in the liquid preservative composition in the range of about 0.01 wt. % to about 0.20 wt. %. The citric acid is preferably present in the liquid preservative composition in the range of about 0.1 wt. % to about 0.5 wt. %. The weight ratio of citric acid to sorbic acid in the liquid preservative composition is preferably in the range of about 20 to 1 to about 1 to 1 and, most preferably, in the range of about 10 to 1 to about 3 to 1. An effective liquid preservative composition has about 0.05 wt. % to about 0.10 wt. % sorbic acid and about 0.3 wt. % to about 0.5 wt. % citric acid.

10. Claims 1-7, 9, 15, 18-20, 22-24, 26, 27, 28-35, 37, 42-47, 49, 50, 55-66, 70-72, 76, 77, 139-144, 146, 148 are rejected under 35 U.S.C. 103(a) as being unpatented over Pregozen (U.S. 5,141,803).

Pregozen discloses an aqueous composition containing (a) 0.02-0.25 wt.% of

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potassium sorbate; (b) 0.05-0.20 wt.% of citric acid; (c) 0.02-0.20 wt.% of disodium salt of EDTA (chelating agent) ; (d) 0.03-0.24 wt.% of cationic biocide; and (e) water to 100 wt.%. Composition has pH 3.5-4.5. Major amount of water employed in the composition is deionized water. Relative amounts of ingredients of composition are within the claimed range (abstract, col.2, line 65 through 3, line 9). Composition in Table in col. 6 recites potassium sorbate *antimicrobial gent of the instant claims), citric acid (cleaning agent of the instant claims) and deionized water in the amounts as instantly claimed.

The difference between Pregozen and the instant claims that Pregozen uses 0.03% wt of biocide, while Applicants by changing the transitional phrase to "consisting essentially of" exclude the components that materially change the composition. However, by the virtue of definition "biocide" is **chemical that kills microorganisms**: a chemical designed to kill organisms, especially microorganisms, i.e. antimicrobial agent.

Therefore, the addition of biocide in Pregozen will only enhance the antimicrobial action of potassium sorbate as an antimicrobial gent, and therefore, such combination would have been obvious to those skilled in the art, since is prima facie obvious to combine two compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose, see In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960).

11. Claims 16, 17, 51-54 and 147 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pregozen in view of Small (U.S. 6,156,661).

With regard to claims 16, 17 and 147 Pregozen discloses the composition as instantly claimed, utilizing sorbic acid and its salts as antimicrobial agents and citric acid and its salts as cleaning agents. Pregozen does not specifically recite the buffering agents, such as ammonium hydroxide.

Small discloses composition for removal of chemical residues from metal or dielectric surfaces or for removal of residues after chemical mechanical polishing of a copper surface, which is an aqueous solution with a pH between about 3.5 and about 7. The composition contains a nonfunctional, difunctional or trifunctional organic acid and a buffering amount of a quaternary amine, ammonium hydroxide (abstract). One of the preferred compositions contains citric acid, ammonium hydroxide and deionized water (Table VII in col. 11)

Since Pregozen is concerned with maintaining the pH of a composition in a specific range, and Small uses the ammonium hydroxide in a post CMP cleaning solution a person skilled in the art would have found it obvious to utilize the buffering agent of Small in compositions in order to buffer the solution and thus to arrive at the instant claims 16,17 and 147.

It is also noted that, since the cleaning agent of Small is identical to Pregozen, and since Small also utilizes formic acid in his cleaning composition claims 1 and 11, which is an antimicrobial agent, a person skilled in the art would have found it obvious to utilize both citric acid (cleaning agent) and formic acid or sorbic acid (antimicrobial agent), as taught by Pregozen, in combination of ammonium hydroxide of Small to maintain the desired pH and thus to arrive at the instant claims.

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With regard to claims 51-54 Pregozen does not expressly disclose the use of another antimicrobial agent, such as benzoate, however, Pregozen does use two antimicrobial agents, one is sorbate and the other is a biocide. Small utilizes benzoic acid in the amounts as claimed in lieu or in combination with citric acid in his composition for cleaning semiconductor wafers (see Table II and claim 1). It is within the skill of those skilled in the art to expect a combination of two known agents to work in an additive or cumulative manner. The combination of two compositions, each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition that is to be used for the same purpose is prima facie obvious *In re Kerkhoven*, 626 F.2d. 846, 850, 205 USPQ 1-69, 1072 (CCPA 1980).

Response to Arguments

12. Applicant's arguments with respect to claims rejected over Dhillon have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's arguments with regard to rejection over Pregozen been fully considered but they are not persuasive. It is first noted that due to Applicant's amendment the Pregozen reference is removed from the scope of 35 USC 102 rejection, and is used now as a 103 reference.

Applicants argues that Pregozen does not teach or suggest Applicant's compositions as claimed, which is formulated with a cleaning agent, an antimicrobial agent and a solvent, or with a cleaning agent an antimicrobial agent, at least one of a

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surfactant, corrosion inhibitor, chelating agent, oxidizing agent and antioxidant, and a solvent -but not a cationic biocide as in Pregozen composition.

This is not found persuasive, since Pregozen does teach the same antimicrobial agent, the same cleaning agent, and the same chelating agent as the instantly claimed, and the addition of a 0.03 % wt of a biocide will NOT change materially the composition, since the biocide has the same function as the antimicrobial agent (by the virtue of its definition and nature), and therefore, it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught by the prior art, see *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980), wherein claims are directed to a process of preparing a spray-dried detergent by mixing two conventional spray-dried detergents were held to be prima facie obvious.

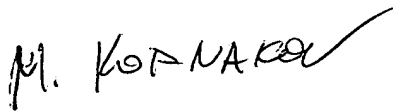
See also *In re Crockett*, 279 F.2d 274, 126 USPQ 186 (CCPA 1960), wherein claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "M. Kornakov", with a long, sweeping horizontal stroke extending to the right.

Michael Kornakov
Primary Examiner
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11/09/2005